PRINT Your Name:____________________

Quiz 1 — January 13, 2012 – Section 8 – 10:10 – 11:00

Remove everything from your desk except this page and a pencil or pen.

$\boxed{\text{Circle}}$ your answer. **Show your work.**
The quiz is worth 5 points.

Find $\int_1^2 \frac{e^{1/x}}{x^2} dx$.

Answer: Let $u = 1/x$. Then $du = -x^{-2}dx$. When $x = 1$, then $u = 1$. When $x = 2$, then $u = 1/2$. The integral is equal to

$$-\int_1^{1/2} e^u du = -e^u|_1^{1/2} = \boxed{e - \sqrt{e}}.$$